

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

John J. Jachetta, Ph.D Business Regulatory Sciences and Government Affairs Leader Dow AgroSciences LLC 9330 Zionsville RD 308/2E Indianapolis, IN 46268-1054

MAY 1 6 2007

Dear Dr. Jachetta:

SUBJECT: Gavel 75DF Fungicide

EPA Registration Number 62719-441 Your Submission of February 2, 2007

NAFTA Harmonization Label OPP Decision Number D376297

The amendment referred to above, submitted in connection with registration under section (3) of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) is acceptable.

Please submit one copy of the final printed labeling before the product is released for shipment. A stamped copy of the label is enclosed for your records. If you have any questions, please contact Lisa Jones of my staff by phone at (703) 308-9424 or by e-mail at jones.lisa@epa.gov.

Sincerely,

Mary L. Waller Product Manager (21)

Fungicide Branch

Registration Division (7505P)

Mary L. Walle

**Enclosure: Stamped Label** 

## **IMPORTANT NOTICE**

This product is registered in both the U.S. and Canada. It has BOTH U.S. and Canadian Labeling

You must follow ONLY the U.S. label WHEN USING THIS product in the U.S.

You must follow ONLY the Canadian label WHEN USING THIS product in Canada

# **AVIS IMPORTANT**

Ce produit est homologué tant aux États-Unis qu'au Canada. Il comporte une étiquette TANT américaine QUE canadienne

Vous devez suivre SEULEMENT l'étiquette américaine en UTILISANT CE produit aux États-Unis.

Vous devez suivre SEULEMENT l'étiquette canadienne en UTILISANT CE produit au Canada



# **Fungicide**

# **Fongicide**

**FONGICIDE** 

GROUP M 22 FUNGICIDE

**AGRICULTURAL** 

READ THE LABEL AND BOOKLET BEFORE USING KEEP OUT OF REACH OF CHILDREN

### **CAUTION**

#### **AGRICOLE**

**GROUPE** 

LIRE L'ÉTIQUETTE ET LE LIVRET AVANT L'UTILISATION

**GARDER HORS DE LA PORTÉE DES ENFANTS** 

### **ATTENTION**

ATTENTION
INGRÉDIENTS ACTIFS/GARANTIE :
MANCOZÈBE : Produit de coordination de l'ion zinc
avec l'éthylène bis(dithiocarbamate)66,7 %
constitué des ingrédients suivants :
Manganèse <sup>++</sup> ·························13,3 %
Zinc <sup>++</sup> 1,7 %
Ion zinc avec l'éthylène bis(dithiocarbamate)
(C <sub>4</sub> H <sub>6</sub> N <sub>2</sub> S <sub>4</sub> )51,7 %
ZOXAMIDE: 3,5-Dichloro-N-(3-chloro-1-ethyl-1-
methyl-2-oxopropyl)-4-methylbenzamide 8,3 %
Ingrédients autres25,0 %
Total 100,0%

ACCEPTED with COMMENTS In EPA Letter Dated: MAY 1 6 2007

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No.

62719-441

# Precautionary Statements Hazards to Humans and Domestic Animals CAUTION

Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Harmful if inhaled. Avoid breathing dust. Remove contaminated clothing and wash clothing before reuse. This product is a dermal sensitizer.

#### **FIRST AID**

When seeking medical attention take the container label if at all possible. If not, take information which identifies the product, that is, the product name and registration numbers.

If swallowed: Call a poison control center or doctor immediately for treatment advice. Have a person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

In the U.S. - In case of emergency endangering health or the environment involving this product call 1-800-992-5994.

#### **Précautions**

Dangereux pour les humains et les animaux domestiques.

#### ATTENTION

Cause une irritation modérée des yeux. Éviter tout contact avec la peau, les yeux ou les vêtements. Se laver à fond avec de l'eau et du savon après la manipulation du produit. Des contacts prolongés ou fréquemment répétés avec la peau peuvent causer des réactions allergiques chez certaines personnes. Dangereux si inhale. Éviter de respirer les poussières. Enlever les vêtements contaminés et les laver avant de les remettre. Ce produit est un sensibilisant de la peau

#### PREMIERS SOINS

Lorsqu'on cherche à obtenir des soins médicaux, apporter l'étiquette du contenant avec soi si c'est possible. Sinon, noter l'information identifiant le produit, c.-à-d. le nom du produit et ses numéros d'homologation.

En cas d'ingestion: Appeler un centre anti-poison ou un médecin immédiatement pour obtenir des conseils sur le traitement. Faire boire un verre d'eau à petites gorges si la personne empoisonnée est capable d'avaler. Ne pas faire vomir à moins d'avoir reçu le conseil de procéder ainsi par le centre anti-poison ou le médecin. Ne rien administrer par la bouche à une personne inconsciente.

En cas de contact avec la peau ou les vêtements: Enlever tous les vêtements contaminés. Rincer immédiatement la peau à grande eau pendant 15 à 20 minutes. Appeler un centre anti-poison ou un médecin immédiatement pour obtenir des conseils sur le traitement.

En cas d'inhalation: Déplacer la personne vers une source d'air frais. Si la personne ne respire pas, appeler le 911 ou une ambulance, puis pratiquer la respiration artificielle, de préférence le bouche-à-bouche, si possible. Appeler un centre anti-poison ou un médecin immédiatement pour obtenir des conseils sur le traitement.

En cas de contact avec les yeux: Garder les paupières écartées et rincer doucement et lentement avec de l'eau pendant 15 à 20 minutes. Le cas échéant, retirer les lentilles cornéennes au bout de 5 minutes et continuer de rincer l'oeil. Appeler un centre anti-poison ou un médecin immédiatement pour obtenir des conseils sur le traitement.

Aux États-Unis - En cas d'urgence menaçant la santé ou l'environnement et mettant en cause ce produit, appeler au 1-800-992-5994.

#### **TOXICOLOGICAL INFORMATION**

No specific antidote. Employ supportive care. Treatment should be based on judgment of the physician in response to reactions of the patient.

#### AGRICULTURAL CHEMICAL

Do not ship or store with food, feeds, drugs or clothing.

#### **STORAGE**

Keep away from fire and sparks. Store in a cool, dry, well-ventilated area. Do not allow to become wet or overheated in storage: decomposition, impaired activity, or fire may result. Keep container closed when not in use. Pallets of containers should not be stacked more than three high. Provide access aisle for each two rows. Decomposition produces a foul odor; if observed, check for hot containers and immediately remove to open areas for disposal.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. For terrestrial uses, do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or disposing of wastes. In Canada - Refer to label booklet for additional buffer zone information.

#### RENSEIGNEMENTS TOXICOLOGIQUES

Aucun antidote spécifique. Donner des soins de soutien. Le traitement doit être basé sur le jugement du médecin en fonction des réactions du patient.

#### PRODUIT CHIMIQUE AGRICOLE

Ne pas entreposer ni expédier près des aliments pour les humains ou les animaux, des produits pharmaceutiques ou des vêtements.

#### **ENTREPOSAGE**

Tenir loin du feu et des étincelles. Entreposer dans un endroit frais, sec et bien ventilé. Éviter l'humidité et la surchauffe durant l'entreposage qui peuvent causer la décomposition, la modification de l'activité ou un incendie. Garder le contenant fermé lorsqu'il n'est pas utilisé. Ne pas empiler plus de 3 palettes de contenants. Laisser un couloir d'accès toutes les 2 rangées. La décomposition produit une mauvaise odeur. Le cas échéant, vérifier si des contenants sont chauds et les sortir immédiatement à l'air libre pour les éliminer.

#### RISQUES POUR L'ENVIRONNEMENT

Ce pesticide est toxique pour les poissons. La derive et le ruissellement provenant des zones traitées peuvent être dangereux pour les organismes aquatiques des zones voisines. Pour les usages au sol, ne pas appliquer directement dans l'eau, dans les endroits où il y a des eaux de surface, ou dans les zones intertidales situées sous la limite de marée haute moyenne. Ne pas contaminer l'eau en y éliminant les eaux de rinçage de l'équipement ou en y éliminant des déchets.

**Au Canada** – Consulter le livret pour plus de renseignements sur les zones tampons.

#### IN THE UNITED STATES

- PPE and Disposal Refer to label booklet for Personal Protective Equipment and Directions for Use including Disposal.
- Agricultural Use Requirements Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to the label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.
- It is a violation of United States law to use this product without having obtained the United States label at the time of purchase and following the U.S. label at the time of application.
- Notice: Read the entire label. Use only according to label directions. Before using this product, read "Warranty Disclaimer," Inherent Risks of Use," and "Limitation of Remedies" at end of label booklet. If terms are unacceptable, return at once unopened.

#### **IN CANADA**

- PPE and Disposal Refer to label booklet for Personal Protective Equipment and Directions for Use including Disposal.
- NOTICE TO USER: This pest control product is to be used only in accordance with the directions on the label. It is an offence under the Pest Control Products Act to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

#### **AUX ÉTATS-UNIS**

Équipement de protection individuelle et élimination – Consulter le livret pour des renseignements sur l'équipement de protection individuelle et le mode d'emploi, y compris l'élimination.

- Exigences relatives à l'exploitation agricole

   N'utiliser ce produit que conformément à son étiquette et au Worker Protection Standard, 40 CFR partie 170. Consulter le livret à «Exigences relatives à l'exploitation agricole» dans la section Mode d'emploi pour des renseignements sur cette norme.
- Utiliser ce produit sans avoir obtenu l'étiquette américaine au moment de l'achat et sans avoir suivi l'étiquette américaine au moment de l'application constitue une infraction à la loi américaine.
- Avis: Lire l'étiquette en entier. N'utiliser ce produit que conformément aux directives de l'étiquette. Avant d'utiliser ce produit, lire les sections «Exonération de garantie», «Risques inhérents à l'utilisation», et «Limitation des recours» à la fin du livret. Si vous n'êtes pas d'accord avec les conditions, retourner immédiatement le produit sans l'ouvrir.

#### **AU CANADA**

- Équipement de protection individuelle et élimination – Consulter le livret pour des renseignements sur l'équipement de protection individuelle et le mode d'emploi, y compris l'élimination.
- AVIS À L'UTILISATEUR: Ce produit antiparasitaire doit être employé strictement selon le mode d'emploi qui figure sur la présente étiquette. L'emploi non conforme à ce mode d'emploi constitue une infraction à la Loi sur les produits antiparasitaires. L'utilisateur assume les risques de blessures aux personnes ou de dommages aux biens que l'utilisation du produit peut entraîner.

Net Contents: 30 lbs/13.6 kgs

Dow AgroSciences, 9330 Zionsville Road, Indianapolis, IN 46268 U.S.A.

In the U.S. - In case of emergency endangering health or the environment involving this product call 1-800-992-5994. If you wish to obtain additional product information, visit our web site at www.dowagro.com. In Canada - For product information call 1-800-667-3852 or visit our web site at www.dowagro.ca.

®Trademark of Dow AgroSciences LLC Before use, read instruction booklet in base of sack.

041607

Contenu net: 30 lbs/13,6 kgs

No de rég. EPA 62719-441 / EPA Est. \_\_\_\_\_\_N° d'homologation 26842 loi sur les produits antiparasitares

Dow AgroSciences, 9330 Zionsville Road, Indianapolis, IN 46268 États-Unis

Aux États-Unis – En cas d'urgence menaçant la santé ou l'environnement et mettant en cause ce produit, appeler au 1-800-992-5994. Pour plus de renseignements sur ce produit, visiter notre site web au www.dowagro.com.

**Au Canada** – Pour des renseignements sur ce produit, appeler au 1-800-667-3852 ou visiter notre site web au www.dowagro.ca.

®Marque de commerce de Dow AgroSciences LLC Avant d'utiliser ce produit, lire le livret d'instructions se trouvant à la base du sac.

041607

(cover)

## IMPORTANT NOTICE

It is a violation of United States law to use this product in the United States in a manner inconsistent with its United States labeling.

# Gavel<sup>®</sup> 75DF Fungicide

A broad-spectrum protectant fungicide for disease control in potatoes, grapes, cucurbits and tomatoes

### Keep Out of Reach of Children

### **CAUTION**

#### **Agricultural Use Requirements**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to the label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

Refer to inside of label booklet for Precautionary Statements and Directions for Use including Storage and Disposal.

ACCEPTED with COMMENTS In EPA Letter Dated:

MAY 1 6 2007

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No.

62719 - 441

Notice: Read the entire label. Use only according to label directions. Before using this product, read "Warranty Disclaimer," Inherent Risks of Use," and "Limitation of Remedies" at end of label booklet. If terms are unacceptable, return at once unopened.

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994. If you wish to obtain additional product information, visit our web site at www.dowagro.com.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

EPA Reg. No. 62719-441

EPA Est. \_\_\_\_\_

®Trademark of Dow AgroSciences LLC

Dow AgroSciences LLC 9330 Zionsville Road Indianapolis, IN 46268 U.S.A.

Net Weight \_\_\_\_\_

(Page 1 through end):

#### **Precautionary Statements**

#### Hazards to Humans and Domestic Animals

#### CAUTION

Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Harmful if inhaled. Avoid breathing dust. Remove contaminated clothing and wash clothing before reuse. This product is a dermal sensitizer.

#### **Personal Protective Equipment (PPE):**

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category A on the EPA chemical resistance category selection chart.

#### Applicators and other handlers (other than mixers and loaders) must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

#### Mixers and Loaders must wear:

- · Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks
- Chemical-resistant apron when cleaning equipment, mixing or loading

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

During aerial application, human flaggers must be in enclosed cabs. When handlers use enclosed cabs or aircraft in a manner that meet the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

#### **User Safety Recommendations**

#### Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove PPE immediately after handling this product.
- Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### First Aid

When seeking medical attention take the container label if at all possible. If not, take information which identifies the product, that is, the product name and registration numbers.

**If swallowed:** Call a poison control center or doctor immediately for treatment advice. Have a person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**If on skin or clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**If inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

**If in eyes:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**In the U.S. -** In case of emergency endangering health or the environment involving this product call 1-800-992-5994.

#### **Environmental Hazards**

This pesticide is toxic to fish. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. For terrestrial uses, do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or disposing of wastes.

In Canada - Refer to label booklet for additional buffer zone information.

#### Directions for use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before applying.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

#### **Agricultural Use Requirements:**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE)and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water, is:

- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Socks and chemical-resistant footwear

**Grapes:** Notify workers that the area has been treated with a pesticide that is a dermal sensitizer by warning them orally and by posting warning signs at the entrances to the treated areas. The signs must be posted in place for 24 hours before the scheduled application and remain in place for 4 days after the end of the application and must state that the area has been treated with a dermal sensitizer. In addition, the following text must appear on the signs: "If an allergic skin reaction (rash, redness, swelling, itchiness) or asthma symptoms or rhinitis occurs following the use of this product report the incident to Dow AgroSciences at 1-800-992"-5994.

**Cucurbits and Tomatoes:** Notify workers that the area has been treated with a pesticide that is a dermal sensitizer by warning them orally and by posting warning signs at the entrances to the treated areas. The signs must be posted in place for 4 days after the end of the application and must state that the area has been treated with a dermal sensitizer. In addition, the following text must appear on the signs: "If an allergic skin reaction (rash, redness, swelling, itchiness) or asthma symptoms or rhinitis occurs following the use of this product report the incident to Dow AgroSciences at 1-800-992"-5994.

**Potatoes:** Notify workers that the area has been treated with a pesticide that is a dermal sensitizer by warning them orally. If an allergic skin reaction (rash, redness, swelling, itchiness) or asthma symptoms or rhinitis occurs following the use of this product report the incident to Dow AgroSciences at 1-800-992-5994

#### Storage and Disposal:

Do not contaminate water, food or feed by storage and disposal.

**Storage:** Keep away from fire and sparks. Store in a cool, dry, well-ventilated area. Do not allow to become wet or overheated in storage: decomposition, impaired activity, or fire may result. Keep container closed when not in use.

Pallets of containers should not be stacked more than three high. Provide access aisle for each two rows. Decomposition produces a foul odor; if observed, check for hot containers and immediately remove to open areas for disposal.

**Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on-site or at an approved waste disposal facility.

**Container Disposal:** Completely empty bag into application equipment. Then dispose of in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**Steps to be Taken in Case Material is Released or Spilled:** Sweep or shovel into containers for disposal or reworking. Keep dusting to a minimum. Flush contaminated area with a large amount of water to a chemical or sanitary sewer containing a settling pit. Refer to Precautionary Statements.

#### **General Use Information**

Gavel 75DF is a broad-spectrum protectant fungicide. Optimum disease control is achieved when the fungicide is applied in a regularly scheduled preventative spray program. The addition of an agricultural surfactant will improve fungicide performance by providing a more uniform spray deposit, increased foliar redistribution, and improved fungicide retention during periods of wet weather.

#### **Use Rate Determination**

- Carefully read, understand, and follow label use rates and restrictions.
- Under low disease conditions, minimum label rates per application can be used while maximum label rates and the minimum interval may be used for severe or threatening disease conditions.
- For proper application, determine the number of acres to be treated, the recommended label use rate and the gallonage to be applied per acre. Prepare only the amount of spray solution required to treat the measured acreage. Careful calibration of spray equipment is recommended prior to use.

#### Mixing

Slowly place into spray tank as it is being filled or thoroughly premix in a nurse tank for concentrate or aircraft sprayers. Add other co-applied fungicides, insecticides, growth regulators, micronutrients, and spray adjuvants after Gavel 75DF fungicide has been placed into suspension.

#### Compatibility

Gavel 75DF fungicide is compatible with most commonly used agricultural fungicides, insecticides and growth regulators. When preparing tank mixes, user should consult spray compatibility charts or State Cooperative Extension Service Specialists prior to actual use.

When using Gavel 75 DF fungicide in a tank mixture, observe all directions for use, precautions and limitations, which appear on the label of the tank mix partner.

#### **Spray Adjuvants**

The addition of agricultural surfactants to Gavel 75DF fungicide sprays will improve initial spray deposits, fungicide redistribution and weatherability. The following spray adjuvants have been especially formulated to optimize the performance of foliar-applied agricultural chemicals:

- Latron B-1956<sup>®</sup> -A water-dispersible, resin-based nonionic surfactant that resists re-wetting and removal by rain. Effective with dilute sprays applied by ground equipment.
- LATRON CS-7<sup>®</sup> -A spreader-binder designed specifically for use in concentrate and low volume sprays applied by aircraft or ground equipment.

Place Gavel 75DF fungicide into suspension prior to adding an adjuvant to the spray mixture. Read and carefully observe the precautionary statements and all other information appearing on both product labels prior to spray preparation.

#### **Application**

**Ground:** Thorough coverage foliar sprays generally result in optimum disease control. To achieve good coverage use proper spray pressure, gallonage per acre, nozzles (generally hollow cone), disc (generally D-5 to D-7), nozzle spacing, and tractor speed. Consult spray nozzle and accessory catalogues for specific information on proper equipment calibration.

**Aerial:** A uniform initial spray deposit over the crop canopy generally results in optimum disease control. Each aircraft should be pre-checked for droplet size, uniformity of spray pattern, swath width, and spray volume. During aerial application, human flaggers are prohibited unless in totally enclosed vehicles.

**Nozzle selection**: Hollow cone brass nozzles with a D-series orifice disc and core (whirl plate) are recommended. Nozzles should point straight down or slightly backward.

**Swath width**: For most field and vegetable crops, swaths just beyond the wingspan of 36 to 40 feet for light aircraft and up to 45 feet for heavier aircraft are suggested. Optimum swath for helicopters is usually 5 to 10 feet beyond normal boom length.

**Spray volume**: Aerial applications are to be made in a minimum of two (2) gallons of water per acre. On potatoes, 2 to 3 gallons of spray per acre are generally optimum; vineyards can be handled with spray volumes of 5 gallons per acre. Some tall or dense vines, requiring greater penetration to the lower leaf surface will require higher spray volumes. **DO NOT USE LESS THAN 5 GALLONS PER ACRE IN CALIFORNIA.** 

Altitude: The spray boom should be positioned in 5 to 10 feet above the crop canopy.

**Flagging**: Swaths should be marked at the end of the field with permanent flags or by a flagman in a totally enclosed vehicle. Swaths should be measured accurately with a chain or other device except when rows can be accurately counted.

#### Spray Drift Management (Aerial Application)

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions. The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

- 1. The distance of the outer most nozzles on the boom must not exceed ¾ the length of the wingspan or rotor.
- 2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the following Aerial Drift Advisory Information section.

#### **Aerial Spray Drift Advisory Information**

**Importance of Droplet Size:** The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversion section of this label).

#### **Controlling Droplet Size:**

**Volume-**Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.

**Pressure-**Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

Number of nozzles-Use the minimum number of nozzles that provide uniform coverage.

**Nozzle Orientation-**Orienting nozzles so that the spray is released backwards, parallel to the airstream will produce larger droplets than other orientations. Significant deflection from the horizontal will reduce droplet size and increase drift potential.

**Nozzle Type-**Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce larger droplets than other nozzle types.

**Boom Length-**For some use patterns, reducing the effective boom length to less than ¾ of the wingspan or rotor length may further reduce drift without reducing swath width.

**Application-**Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

**Swath Adjustment:** When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.).

**Wind:** Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. Note: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect drift.

**Temperature and Humidity:** When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions: Applications should not occur during a temperature inversion, because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a connected cloud (under low wind conditions) indicates an inversion, while smoke that moves upwards and rapidly dissipates indicates good vertical air mixing.

**Sensitive Areas:** The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, nontarget crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

### **Chemigation Use Directions**

#### Sprinkler Irrigation

Gavel 75DF fungicide must be applied on a regular protectant fungicide schedule, **not an irrigation schedule**. If irrigation cycles are less frequent than recommended Gavel 75DF fungicide application intervals, ground or aerial applications must supplement chemigation applications to achieve adequate disease control.

- Apply Gavel 75DF fungicide only through sprinkler irrigation systems including center-pivot, lateral
  move, end tow, side (wheel) roll, traveler, solid set, or hand move irrigation systems. Do not apply
  product through any other type of irrigation system.
- Lack of fungicidal effectiveness or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- If you have questions about calibration, you should contact State Extension Service specialist, equipment manufacturers or other experts.
- Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a
  public water system unless the pesticide label-prescribed safety devices for public water system are in
  place.

 A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

# Before applying Gavel 75DF fungicide through sprinkler irrigation equipment, the chemigation system must meet the following specifications:

- Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- Chemigation systems connected to public water systems must contain a functional reduced-pressure zone (RPZ), backflow preventer or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- Systems not connected to a public water supply must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located in the irrigation pipeline to prevent water source contamination from back flow.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed solenoid-operated valve
  located on the intake side of the injection pump and connected to the system interlock to prevent fluid
  from being withdrawn from the supply tank when the irrigation system is either automatically or
  manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Do not apply when wind speed favors drift beyond the area intended for treatment.

# Center-pivot, Lateral Move, End Tow, and Traveler Irrigation Equipment (use only with electric or oil hydraulic drive systems, which provide a uniform water distribution):

- · Determine size of area to be treated.
- Determine the time required to apply no more than 1/4 inch water (6,750 gallons water per acre) over the area to be treated when the system and injection equipment are operated at normal pressures recommended by the equipment manufacturer. Run system at 80 to 95% of manufacturer's rated capacity.
- Using only water, determine the injection pump output when operated at normal line pressure.
- Determine the amount of Gavel 75DF fungicide required to treat area.
- Add the required amount of Gavel 75DF fungicide and sufficient water to meet the injection time requirements of the solution tank.
- Maintain constant solution tank agitation during the injection period.
- Stop injection equipment after treatment is completed. Continue to operate the system until Gavel 75DF fungicide solution has cleared the sprinkler head.

#### Solid-set, Side (wheel) Roll, and Hand Move Irrigation Equipment:

- Determine acreage covered by sprinkler.
- Fill injector solution tank with water and adjust flow rate to use contents over a 10 to 30 minute interval.
- Determine the amount of Gavel 75DF fungicide required to treat area.
- Add the required amount of Gavel 75DF fungicide into the same quantity of water used to calibrate the injection equipment.
- Maintain constant solution tank agitation during the injection period.
- Operate system at normal pressures recommended by the manufacturer of the injection equipment and used for the time interval established during calibration.
- Inject Gavel 75DF fungicide at the end of the irrigation cycle or as a separate application to maximize foliar fungicide retention.
- Stop injection equipment after treatment is completed. Continue to operate the system until Gavel 75DF fungicide solution has cleared the last sprinkler head.

#### Restrictions

Users should carefully read, understand, and follow all use restrictions prior to using Gavel 75DF fungicide.

#### Foliar Applications

Where EBDC Products Used Allow the Same Maximum Poundage of Active Ingredient Per Acre Per Season: If more than one product containing an EBDC active ingredient (maneb, mancozeb, or metiram) is used on a crop during the same growing season and the EBDC products used allow the same maximum poundage of active ingredient per acre per season, then the total poundage of all such EBDC products used must not exceed any one of the specified individual EBDC product maximum seasonal poundage of active ingredient allowed per acre.

Where EBDC Products Used Allow Different Maximum Poundage of Active Ingredient Per Acre Per Season: If more than one product containing an EBDC active ingredient is used on a crop during the same growing season and the EBDC products used allow different maximum poundage of active ingredient per acre per season, then the total poundage of all such EBDC products used must not exceed the lowest specified individual EBDC product maximum seasonal poundage of active ingredient allowed per acre.

Seed Treatment: In addition to the maximum number of foliar applications permitted by the formula stated above, a single application for seed treatment may be made on crops that have registered seed treatment uses.

**Rotational Crop Restrictions:** The following rotational crops may be planted at intervals defined below, following the final application of Gavel 75DF fungicide at the recommended rates for a registered use:

Crop	Re-Cropping Interval
Crops for which Gavel 75DF use is registered	No restrictions
All other crops	30 days

### Use Directions by Crop

#### Cucurbits, including the following:

Cucumber (Cucumis sativus)

Melons: cantaloupe, casaba, crenshaw, honeydew, muskmelon

Squash, summer (Cucurbita pepo var. melopepo) including: crookneck squash, scallop squash,

straightneck squash, vegetable marrow and zucchini

Watermelon including hybrids and/or varieties of Citrullus lanatus

Diseases Controlled	Rate of Gavel 75DF (lb/Acre)	Remarks (See Also Directions for Use)	Restrictions
Alternaria leaf spot Cercospora leaf spot Downy mildew Fruit and stem rot	1.5 to 2.0 (1.13 to 1.5 lb active)	Start applications when plants are in the two-leaf stage and repeat at 7- to 10-day intervals or when environmental conditions are favorable for disease development. Use sufficient water and direct sprays to provide thorough coverage of foliage, stems and developing fruit.  Some cantaloupe varieties (i.e.: Harvest Queen, Gold Star, Super Star, Sweet and Early, and Saticoy) are sensitive to Gavel 75DF. Consult State Cooperative Extension Service Specialist prior to use.	Do not make more than 8 applications or apply more than 16 lb (10.67 lb active mancozeb and 1.33 lb active zoxamide) per acre per crop. Do not apply within 5 days of harvest. Use Gavel 75DF to provide preventative control of downy mildew only when other Gavel 75DF-labeled diseases are anticipated. Do not tank mix with another fungicide if the target pest is only downy mildew. Tank mix only if a partner is required to control other diseases.

Grapes			
Diseases Controlled	Rate of Gavel 75DF (lb/Acre)	Remarks (See Also Directions for Use)	Restrictions
Bunch Rot Dead Arm Downy Mildew	2.0 to 2.5 (1.5 to 1.9 lb active)	Apply in sufficient water to provide thorough coverage starting when new shoots are 1/2 to 1-1/2 inches long. Repeat when shoots are 3 to 5 inches long, when shoots are 8 to 10 inches long, and then at 7 -to 10-day intervals.	In California, do not apply after bloom. In other areas, do not apply within 66 days of harvest. West of the Rocky Mountains, do not make more than 3 applications or apply more than 7.5 lb (5 lb active mancozeb an 0.62 lb active zoxamide) per acre per season.  East of the Rocky Mountains, do not make more than 8 applications or apply more than 15 lb (10 lb active mancozeb and 1.25 lb zoxamide) per acre per season.

Potatoes			
Diseases Controlled	Rate of Gavel 75DF (lb/Acre)	Remarks (See Also Directions for Use)	Restrictions
Late blight Early blight	1.5 to 2.0 (1.13 to 1.5 lb active)	Begin applications at the first sign of disease or when late blight is reported in the area. Use a 5 to 7 day schedule when late blight is present and environmental conditions favor continued disease development. Under low disease conditions and environmental conditions unfavorable for disease development, a 7 -to 10- day application schedule may be used.  Increase the use rate according to vine development. Use the maximum labeled rate at row fill.	Do not make more than 6 applications or apply more than 12 lb (8 lb active mancozeb and 1 lb active zoxamide) per acre per crop. Do not apply within 3 days of harvest in Connecticut, Delaware, Florida, Maine, Massachusetts, Michigan, New Hampshire, New York, Ohio, Pennsylvania, Rhode Island, Vermont and Wisconsin and at least 14 days elsewhere.

Tomatoes			
Diseases Controlled	Rate of Gavel 75DF (Ib/Acre)	Remarks (See Also Directions for Use)	Restrictions
Buckeye rot Early blight Gray leaf spot Late blight Leaf mold Septoria leaf spot	1.5 to 2.0 (1.13 to 1.5 lb active)	Start applications when seedlings emerge or transplants are set and repeat at 7- to 10-day intervals or when environmental conditions are favorable for disease development.  The addition of Latron surfactants to spray solutions will	West of the Rocky Mountains, do not make more than 4 applications or apply more than 8 lb (5.33 lb active mancozeb and 0.66 lb active zoxamide) per acre per season.  East of the Rocky Mountains, do not make more than 8 applications or apply more than
Bacterial speck Bacterial spot		improve performance.  Use a full rate of fixed copper fungicide in tank mix combinations with a full rate of Gavel 75DF.  Follow the application intervals recommended on the copper fungicide label	applications of apply more than 16 lb (10.67 lb active mancozeb and 1.33 lb active zoxamide) per acre per season.  Do not apply within 5 days of harvest.  Use Gavel 75DF to provide preventative control of late blight only when other Gavel 75DF-labeled diseases are anticipated.  Do not tank mix with another fungicide if the target pest is only late blight. Tank mix only if a partner is required to control other diseases.

ATTENTION: This product contains mancozeb and ETU, chemicals known to the State of California to cause cancer. ETU is also known to the State of California to cause birth defects or other reproductive harm.

#### **Terms and Conditions of Use**

If terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitations of Remedies.

#### **Warranty Disclaimer**

Dow AgroSciences warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. To the extent permitted by law, Dow AgroSciences MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

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It is impossible to eliminate all risks associated with use of this product. Plant injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperature, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Dow AgroSciences or the seller. To the extent permitted by law, all such risks shall be assumed by buyer.

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- 1. Refund of purchase price paid by buyer or user for product bought, or
- 2. Replacement of amount of product used

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